

p368 # 65-86 all

65.  $\sin 10^\circ = .1736$       66.  $\sec 225^\circ = -1.4142$   
 67.  $\cos(-110^\circ) = -.3420$       68.  $\csc(-330^\circ) = 2.0000$   
 69.  $\tan 304^\circ = -1.4826$       70.  $\cot(178^\circ) = -28.6363$   
 71.  $\sec 72^\circ = 3.2361$       72.  $\tan(-188^\circ) = -.1405$   
 73.  $\tan 4.5 = 4.6373$       74.  $\cot 1.35 = .2245$   
 75.  $\tan \frac{\pi}{9} = .3640$       76.  $\tan(\frac{\pi}{9}) = -.3640$   
 77.  $\sin(-.65) = -.6052$       78.  $\sec(.29) = 1.0436$   
 79.  $\cot(-\frac{11\pi}{8}) = -.442$       80.  $\csc(-\frac{15\pi}{14}) = 4.4940$

81. a)  $\sin \theta = \frac{1}{2}$   
 $\theta = 30^\circ, 150^\circ$   
 $\frac{\pi}{6}, \frac{5\pi}{6}$

b)  $\sin \theta = -\frac{1}{2}$   
 $\theta = 210^\circ, 330^\circ$   
 $= \frac{7\pi}{6}, \frac{11\pi}{6}$

82. a)  $\cos \theta = \frac{\sqrt{2}}{2}$   
 $\theta = 45^\circ, 315^\circ$   
 $\frac{\pi}{4}, \frac{7\pi}{4}$

b)  $\cos \theta = -\frac{\sqrt{2}}{2}$   
 $\theta = 135^\circ, 225^\circ$   
 $= \frac{3\pi}{4}, \frac{5\pi}{4}$

$\frac{2}{\sqrt{3}}$  83. a)  $\csc \theta = \frac{2\sqrt{3}}{3}$   
 $\sin \theta = \frac{\sqrt{3}}{2}$   
 $\theta = 60^\circ, 120^\circ$   
 $\frac{\pi}{3}, \frac{2\pi}{3}$

b)  $\cot \theta = -1$  (~~4/4~~)  
 $\theta = 135^\circ, 315^\circ$   
 $\frac{3\pi}{4}, \frac{7\pi}{4}$

84. a)  $\sec \theta = 2$   
 $\cos \theta = \frac{1}{2}$   
 $\theta = 60^\circ, 300^\circ$   
 $\frac{\pi}{3}, \frac{5\pi}{3}$

b)  $\sec \theta = -2$   
 $\theta = 240^\circ, 120^\circ$   
 $\frac{4\pi}{3}, \frac{2\pi}{3}$

85. a)  $\tan \theta = 1$   
 $\theta = 45^\circ, 225^\circ$   
 $\frac{\pi}{4}, \frac{5\pi}{4}$

b)  $\cot \theta = -\sqrt{3}$   
 $\theta = 150^\circ, 330^\circ$   
 $\frac{5\pi}{6}, \frac{11\pi}{6}$



$$8b. \sin \theta = \frac{\sqrt{3}}{2}$$

$$\theta = 60^\circ \quad 120^\circ$$

$$\frac{\pi}{3} \quad \frac{2\pi}{3}$$

$$b) \sin \theta = -\frac{\sqrt{3}}{2}$$

$$\theta = 240^\circ \quad 300^\circ$$

$$\frac{4\pi}{3} \quad \frac{5\pi}{3}$$